

VISHAL PATEL (CEng, MIE)

Sr. Signaling System Expert (Metro and Main Line including Semi High Speed)

## SUMMARY

Undersigned is :

- A Chartered Engineer (CEng) and Member (MIE) of the Institution of Engineers (India) and also Registered Professional Engineer in the Engineers Registration Board, Tanzania.
- Railway Signaling Engineer with 22+ years of Professional experience (International 5+ & India 17+) for Project Management, Quality Assurance, Design, Installation Testing and commissioning, operation and maintenance for Metro and Main Line Railway Signaling.
- Having knowledge and international experience of condition of the contract for EPC/Turnkey project as per the FIDIC yellow book.
- Experience of Design Review and Supervision of Installation, Testing & Commissioning of ERTMS/ ETCS Level 2 with GSM-R for Bombardier/Alstom Signaling & Huawei GSM-R in SGR Project Tanzania from Consultant side. (For **160 Kmph** Design speed)
- Having Experience of NDB funded project for Tender Preparation, Evaluation, Design Review & Supervision of Installation of ERTMS/ETCS Level 2 with LTE for Alstom Signaling in NCRTC DELHI RRTS Project of India from Consultant side. (For **180 Kmph** Design speed)
- Experience of CBTC SIEMENS in Nagpur Metro Rail from Consultant side.
- Having Design Experience of K5BMC SSI and TMS of Kyosan in Japan, Microlok II SSI of Ansaldo STS in India from Contractor side.
- Having experience of preparation of RAMS documents for the NIPPON signal for Delhi Metro Rail Line-8 from Contractor side.
- Having experience of Independent Safety Assessment audit for Metro Railway Signaling System from Consultant side.

- Having experience of Preparation of S&T Tender Documents for Railway Signaling Projects in India for Kyosan Japan from Contractor side.

## EDUCATION

- B. E. in Electronics & Communication Engineering from RGPV Bhopal in year 2001
- Diploma in Advance computing (C-DAC) from Advanced Computing Training School, Pune in year 2002

## CERTIFICATION

- Chartered Engineer (India) (CEng) from the Institution of Engineers, India
- Member (MIE) of the Institution of Engineers, India
- Registered Temporary Professional Engineer in the Engineers Registration Board, Tanzania
- Certification in Basic Signaling from Indian Railway Signaling & Telecommunication School Ghaziabad in year 2005.
- Certification in Maintenance of SICAS ECC Electronic Interlocking from SIEMENS Transportation System in year 2006.
- Certification in outdoor Equipment FTGS and Bonding for Delhi Metro Rail Corporation Ltd from SIEMENS Transportation System in year 2006.
- Certification in C & C++ Language from GIRC, Indore in year 2001.

## WORK HISTORY

### 1. COMPANY: BARSYL

**PROJECT NAME:** SGR Line Project, Tanzania, East Africa, General Consultancy

**JOB TITLE:** Sr. Signalling Expert

**DURATION:** July 2021 to till date

### 2. COMPANY: ITALFER

**PROJECT NAME:** National Capital Region Transport Corporation, (NCRTC) DELHI

RRTS General Consultancy, Delhi

**JOB TITLE:** Sr. Signaling System Expert

**DURATION:** Feb 2020 to June 2021

**3. COMPANY:** BARSYL

**PROJECT NAME:** SGR Line Project, Tanzania, East Africa, General Consultancy

**JOB TITLE:** Sr. Signalling Expert

**DURATION:** Aug 2018 To Jan 2020

**4. COMPANY:** EGIS INDIA CONSULTING ENGINEERS PVT. LTD.

i. **PROJECT NAME:** ISA Project of DMRC and Bangalore Metro

**JOB TITLE:** Deputy ISA

**DURATION:** Sept 2017 to July 2018

ii. **PROJECT NAME:** Nagpur Metro General Consultancy

**JOB TITLE:** Sr. Maintenance Expert Signal, Telecom & AFC

**DURATION:** MAY 2017 to Aug 2017

iii. **PROJECT NAME:** Mumbai Metro Line-3 General Consultancy

**JOB TITLE:** Project Interface Coordinator

**DURATION:** Aug 2016 to April 2017

**5. COMPANY:** LARSEN & TOUBRO TECHNOLOGY SERVICES LIMITED

i. **PROJECT NAME:** Hanshin Railway, **Japan** and DFCCIL project of Kyosan

**JOB TITLE:** Domain Consultant Signaling

**DURATION:** Nov 2015 to Aug 2016

ii. **PROJECT NAME:** Ansaldo STS Noida, IRPMU KFW Design Project

**JOB TITLE:** Project Manager

**DURATION:** Dec 2012 to Oct 2015

**6. COMPANY:** DELHI METRO RAIL CORPORATION LTD, NEW DELHI, INDIA

**PROJECT NAME:** DMRC PH-II, Line-3

**JOB TITLE:** Asst. Section Engineer (Signal & Train Control)

**DURATION:** Sept 2005 to Nov 2012

**7. COMPANY:** APTECH

**PROJECT NAME:** Railway Drawings Automation project

**JOB TITLE:** Assistant Designer & Faculty

**DURATION:** July 2002 to Aug 2005

**PROJECT  
EXPERIENCE**

1. **PROJECT NAME:** SGR Line Project, Tanzania, East Africa  
(**160 Kmph** Design speed – Semi High Speed)

**DURATION:** July 2021 to till date and Aug 2018 to Jan 2020

**JOB TITLE:** Sr. Signalling Expert

**Contribution:** Overall, in charge of 200 Km Section for Design Review of Site installation, Testing and commissioning documents and As Built designs including Supervision of installation, Testing and Commissioning for **ERTMS Level 2** with GSM-R Radio communication network. Also, responsible for monitoring and controlling the project as per the condition of contract FIDIC.

2. **PROJECT NAME:** National Capital Region Transport Corporation, (NCRTC)  
RRTS, DELHI General Consultancy  
(**180 Kmph** Design speed – Semi High Speed)

**DURATION:** Feb 2020 to June 2021

**JOB TITLE:** Sr. Signaling System Expert

**Contribution:** S&T tender preparation, preparation of response for prebid queries, tender evaluation, design review, supervision of installation, testing and commissioning of signaling system based on **ETCS L2 WITH LTE**.

3. **PROJECT NAME:** ISA PROJECT OF DMRC AND BANGALORE METRO

**DURATION:** Sept 2017 to July 2018

**JOB TITLE:** Deputy ISA

**Contribution:** Quality check audit for DMRC line-2 extension of CS02 project & BMRCL Line-2 Project: such as **Design review** and assessment, Site Installation Audit, Safety Case Assessment, T&C Audit, O&M Assessment and Trial Running Test Assessment.

4. **PROJECT NAME:** Nagpur Metro General Consultancy

**DURATION:** MAY 2017 to Aug 2017

**JOB TITLE:** Sr. Maintenance Expert Signal, Telecom & AFC

**Contribution:** **Review of the CBTC signaling design**, O&M manual, creating the special operating instruction for newly constructing metro. Finalization of SOP (standard operating procedure), SWR (station working rules) for stations and depot. Coordination/ Interface with the entire concerned department for finalization of Operation and maintenance procedure for SIEMENS CBTC system.

5. **PROJECT NAME:** Mumbai Metro Line-3 General Consultancy

**DURATION:** Aug 2016 to April 2017

**JOB TITLE:** Project Interface Coordinator

**Contribution:** Responsible for project coordination, Signalling system integration **design review** with other systems. Evaluation of Tender, Signalling Interface management etc.

6. **PROJECT NAME:** Hanshin Railway, **Japan** and DFCCIL project of Kyosan

**DURATION:** Nov 2015 to Aug 2016

**JOB TITLE:** Domain Consultant Signaling

**Contribution:**

- Involved in the Application data design for CBTC system of Kyosan.
- **Design review** of Main Line Railway Signalling system **ETCS L2 with GSMR** for the DFCCIL project.
- Worked for Japan Railways signaling system in Kyosan and created the specifications and circuits description for the Application Data Designers of Japan and Indian Railways.
- In Kyosan Japan prepared the system configuration and design specification of TMS (Train Management system) for WDFC project of Indian Railways, where Kyosan has provided TMS and signaling system (JNPT to Vadodara section).
- Prepared the Signalling system design specifications in Kyosan for WDFC project (STP-17 & CTP-14) of Indian Railways.

7. **PROJECT NAME:** KfW 4th Section – Modernization of Signaling & Interlocking Systems To Automatic Block Signaling & Solid State Interlocking for Microlok II SSI of Ansaldo

**JOB TITLE:** Project Manager

**DURATION:** Dec 2012 to Oct 2015

**Contribution:** **Design Team Lead** & Project Manager

- Worked as a project Manager as well as **Design Team Lead** of 25 Railway Signaling Engineers for Indian Railways Signaling Design project for 10 Stations and 12 Block Sections as well as 3 big yards of KFW Project

(Kanpur- Ghaziabad section).

- Involved in the Verification and Validation of Indian Railway Signaling **Drawings and Designs** viz. signaling Interlocking Plan, Cable core Plan and Interface Circuits.
- Involved in the Designing and Independent checking of Control Table as per Indian Railway standards and practice for 3 nos. of Big Yards having more than 250 routes.
- Coordination with Team Members related to technical issues and ensuring on time deliveries with utmost quality with managing all the stakeholders of the project.
- Prepared BOQ (Bill of Quantity) Estimation for Stations & Automatic Block Sections.

**8. PROJECT NAME:** DMRC PH-II, Line-3

**DURATION:** Sept 2005 to Nov 2012

**JOB TITLE:** Asst. Section Engineer (S&TC)

**Contribution:**

- Worked as an Interface Engineer for the client & contractor to ensure the project progress.
- Worked as a Project Engineer for the 7 Interlocking Stations from Barakhamba to Dwarka as well as for Dwarka extension line for **ETCS** signalling system.
- Experience of Verification of installation and design, settings to work , function testing and correspondence testing of wayside equipment, cable testing, site acceptance testing and controlled changeover of modifications.
- Supervised the Testing and commissioning of the Solid-State Computer Based Interlocking of the SIEMENS and its validation.
- Involved in Testing, commissioning of onboard Signaling Equipment's (on Board ATP and TIC) of Metro cars, commuter cars, light rail vehicles, Experience of System Integration between Signaling System with Rolling stock.
- Experience of supervision of Installation, Testing and commissioning of AFTC, Start -up loops and Synchronous Loops, Track Side ATP and On-Board ATP with the real time train movement.

- Installation, Testing and commissioning supervision experience of Signals S 140, K400, Point Machine S700K, S Bond, Double S Bond and Alpha Bond with the help of Cad Welding.
- Verification and Testing of Interlocking as per Interlocking Principle and Route Table Plan with the simulation of train movement.
- Dynamic Train testing for rectification of failures as well as for any modification in the system.
- Experience of making Earth Pit for Main Earth and Clean Earth and its commissioning.
- Preventive and corrective Maintenance (O&M) of the Signaling Gears for 3 Interlocking Stations.
- Experience for Planning and Scheduling of onsite Installation and commissioning activities.
- Creating the Test Procedures and Test reports as per set Specifications.

**9. PROJECT NAME:** Railway Drawings Automation

**DURATION:** July 2002 to Aug 2005

**JOB TITLE:** Assistant Designer & Faculty

**Contribution:**

- Support in the development of Railway Design Automation tool for preparation of Main line Railway Signalling Designs such as Signaling Plan, Interface circuits.

**PERSONAL DETAILS**

**Name** : Vishal Patel

**Email** : vishalpatel2k@yahoo.com

**Date of Birth** : 16 July 1976

**Sex** : Male

**Passport Status** : Valid up to July-2031

**Visa Status** : East Africa, Tanzania, valid up to Dec-2025